Exhaust Ventilation Systems

WAC 286-818-400

Section Contents

YOUR RESPONSIBILITY:

To make sure exhaust ventilation systems meet these requirements

Exhaust Ventilation Systems

WAC 296-818-400

Rule

WAC 296-818-40005

Construction

You must

- Make sure exhaust systems are constructed, installed, inspected, and maintained to meet both of the following:
  - The American National Standards Institute (ANSI), Z9.2-2001 for:
    - Fundamentals Governing the Design and Operation of Local Exhaust Systems
  - The National Fire Protection Association (NFPA) 91-2004 for:
    - Exhaust Systems for Air Conveying of Vapors, Gases and Noncombustible Particulate Solids.

Reference:

- Refer to the American National Standards Institute, ANSI Z9.4-1997 for information on the following:
  - Exhaust Systems for Abrasive-blasting Operations, Ventilation, and Safe Practices for Fixed Location Enclosures.

WAC 296-818-40010

Explosion venting and wiring

You must

- Follow the requirements in Table-3 for flammable or combustible dust mixtures.

Table 3
Explosion Venting and Wiring

If you have	Then
Flammable or explosive dust mixtures that may be present	Make sure the construction of equipment, including the exhaust system and all electrical wiring, meets both of the following – The American National Standard Installation (ANSI) of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying, NFPA 91. 2004. – The electrical requirements for Class II locations in WAC 296-24-95613, located in Part L of chapter 296-24 WAC. Make sure blast cleaning enclosures, the ducts, and the dust collector are constructed with either loose panels or explosion venting areas that meet all of the following: – Provides pressure relief in case of an explosion. – Are located away from occupied areas. – The Guide for Deflagations, NFPA 68. 2002.

Exhaust Ventilation Systems

WAC 296-818-400

Rule

WAC 296-818-40015

Inspection and maintenance

You must

- Make sure the exhaust ventilation system is fully operational by checking the static pressure drop at the exhaust ducts leading from the equipment at both of the following times:
  - When installation is completed
  - Annually after installation.
- Repair or clean exhaust systems when either of the following occur:
  - Dust leaks are found
    or
  - The pressure drop gauge indicates a change exceeding 20 percent.
- Use an abrasive separator to separate larger particles for reuse on installations where abrasive is recirculated.
- Set up dust collecting equipment to do both of the following:
  - Empty and remove accumulated dust without contaminating work areas
  - Discharge the air used in blast cleaning equipment.

Note:

Dispose fine dust from dry collectors by doing one of the following:

- Emptying and transporting the fine dust in enclosed containers
- Using a sluice with a wetting process to contain the dust.